

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claim 5 and AMEND claims 1, 3 and 4 in accordance with the following:

1. (CURRENTLY AMENDED) An integrated circuit device having a send/receive macro for serially transferring addresses and data to or from an external device via a serial transfer bus having a single data line and a single clock line, the integrated circuit device comprising:

a CPU ~~for~~ performing predetermined processing, wherein

the send/receive macro is connected to the serial transfer bus and carries out the data transfer serially over the single data line in synchronization with a clock driven onto the single clock line, and

the send/receive macro comprises:

a send/receive buffer, accessed by the CPU, ~~for~~ storing a plurality of units of data to be transmitted to or received from the serial transfer bus;

an acknowledge detection unit ~~for~~ detecting a data acknowledge signal transmitted from a receiving device in response to transmission of a predetermined units of data; and

a data send unit ~~for~~ serially transmitting the predetermined unit of data stored in the send/receive buffer via the serial transfer bus, ~~in response to detection of the data acknowledge signal by the acknowledge signal detection unit, without generating any interrupt to the CPU, and~~ wherein

the data send unit repeats a next data transmission with the predetermined unit of data, in response to detection of the data acknowledge signal by the acknowledge detection unit, without generating any interrupt to the CPU, and

the acknowledge detection unit generates a data acknowledge signal non-detection interrupt to the CPU if the acknowledge detection unit does not detect the data acknowledge signal transmitted from the receiving device in response to transmission of the predetermined units of data.

2. (CURRENTLY AMENDED) The integrated circuit device according to claim 1, wherein;

the data transmission from the data send unit is terminated in response to the data acknowledge signal non-detection interrupt to the CPU.

3. (CURRENTLY AMENDED) An integrated circuit device having a send/receive macro serially transferring addresses and data to or from an external device via a serial transfer bus, the integrated circuit device comprising:

a CPU performing predetermined processing,

wherein the send/receive macro comprises:

a send/receive buffer, accessed by the CPU, storing a plurality of units of data to be transmitted to or received from the serial transfer bus;

an acknowledge detection unit detecting a data acknowledge signal transmitted from a receiving device in response to transmission of a predetermined unit of data; and

a data send unit for transmitting the predetermined unit of data stored in the send/receive buffer, in response to detection of the data acknowledge signal by the acknowledge detection unit, without generating any interrupt to the CPU, and wherein

the acknowledge detection unit generates a data acknowledge signal non-detection interrupt to the CPU if the acknowledge detection unit does not detect the data acknowledge signal transmitted from the receiving device in response to transmission of the predetermined unit of data~~The integrated circuit device according to claim 1, and wherein~~ when an address acknowledge signal is detected, that is sent by a slave device in response to a transmission of an address identifying the slave device by the data send unit as a master, the acknowledge detection unit generates an interrupt to the CPU.

4. (CURRENTLY AMENDED) The integrated circuit device according to claim 43, wherein;

the data send unit initiates serial transmission of predetermined units of data stored in the send/receive buffer, after an interrupt to the CPU generated when the acknowledge detection unit detects the address acknowledge signal.

5. (CANCELLED)